

February 27, 2020

US Environmental Protection Agency, R10 c/o Ken Marcy, National Priorities List Coordinator 805 SW Broadway, Suite 500 Portland, OR 97205

RE: Bradford Island - Yakama use, treaty rights, and health concerns

Dear Mr. Marcy:

The Bradford Island area has been an historical fishing area and home to the Confederated Tribes and Bands of the Yakama Nation (Yakama). It remains to be an important usual and accustomed (U&A) fishing area for cultural, subsistence and commercial fisheries today. However, Yakama Nation is concerned that ongoing consumption of resident fish and resulting exposure to Bradford Island contamination is occurring. Bradford Island, North Bonneville, and the surrounding area were occupied by indigenous people since time immemorial and prior to white settlers and the US government land take-overs. Bradford Island itself was formerly owned by a Yakama member (per George Meninick, YN Cultural Program). There are numerous cultural/archaeological sites on the island and along the river shorelines (confidentiality applies).

Currently, the Fort Rains/Bonneville Tribal Treaty Fishing Access Site is located within a half mile of Bradford Island and partially within the In-river Operable Unit of the site (see Figure 1). There are also numerous U&A tribal fishing platforms located within a third of a mile from Bradford Island and within the Bradford Island In-river Operable Unit (Figure 2). Today, tribal members fish from platforms on the western tip of Goose Island and along the Oregon and Washington shorelines. As you know, fish swim significant distances from where they feed and so fish caught outside of the "Zone of Contamination" (Figure 3) also contain concentrations of Bradford Island contaminants at concentrations orders of magnitude above current human health toxicity criteria. Therefore, we are more concerned about the larger area of contaminated resident fish caught within and potentially beyond the Bradford Island Inriver Operable Unit (Figure 4). The cultural and health impacts of contaminated resident fish species on Indian treaty fishing in the Columbia River are enormous because enrolled tribal members traditionally do not waste by-catch caught in gill nets. When fishing for salmon or other fish species by-catch of any type is kept and utilized as the belief is that every fish is a gift from the Creator and Yakama Nation members are taught not to waste these precious resources. Yakama families and individuals are dependent on salmon and other fish and shellfish species including, but not limited to sturgeon, crayfish, and clams. Between migratory fish runs tribal members may rely on resident fish and shellfish for sustenance. We are concerned that tribal members continue to eat contaminated fish caught in the Bradford Island area, and exposure varies by family, cultural practices, and awareness of contamination issues.

Although a U&A treaty fishing area, enrolled Yakama members are currently prohibited (by tribal regulation) from building fishing platforms on Bradford Island. This decision to issue tribal regulations prohibiting fishing platforms on Bradford Island is a direct result of contamination issues and safety concerns. This decision does not affect other ongoing fishing activities in the vicinity of Bradford Island, within the affected In-River Operable Unit.

In 2013, both the Oregon Health Authority and the Washington Department of Health issued fish consumption advisories for resident fish species in the Columbia River above Bonneville Dam due to elevated levels of mercury and PCBs. Fetuses in utero, nursing babies and small children are most vulnerable to the health effects of these contaminants of concern. Fetuses and babies exposed to high levels of mercury and PCBs can suffer life-long learning and behavior problems. Fishers have been warned not to give resident fish caught from the middle Columbia River to others unless the recipients are aware of where the fish were caught and understand the recommendations in the state fish advisories. Outreach efforts, related to consumption of contaminated fish and shellfish tissue, by the US Army Corps of Engineers (Corps) or others, beyond the health authorities' websites and signage, is lacking. This situation is extremely concerning to the Yakama. Many tribal fishers know very little about this issue, are concerned, and want to know more. Some fishers have stated that they previously sold sturgeon from the Bonneville Pool but no longer do because of concerns about contamination.

Anadromous and resident fish species use the Bradford Island area of the Columbia River for foraging, migration, rearing, spawning, and overwintering habitat. All fish species, adult and juvenile, would be expected to swim in, adjacent to or near the "Zone of Contamination" (Figure 3) identified by the EPA (Ken Marcy email correspondence, February 13, 2020). Several ESA-listed species are found in the waters surrounding Bradford Island, including their designated critical habitat and essential fish habitat. Table 1 provides a summary of fish species, distribution and life histories expected to be encountered in the Bradford Island area. The information was obtained from the Washington State Department of Fish and Wildlife SalmonScape Mapping Tool and Oregon Department of Fish and Wildlife Compass Mapping Tool.

With respect to delineation, Yakama Nation has submitted a significant number of comments to the administrative record expressing concerns about the inadequacy of the Corps' Remedial Investigation, Risk Management Decisions, and subsequent investigation efforts to delineate and characterize the site. Therefore, we have low confidence that the "Zone of Contamination" represented in Figure 3, is an accurate or complete representation of where contamination from the Bradford Island facility has come to be located and where risks to ecological and human receptors are present. These data gaps must be addressed.

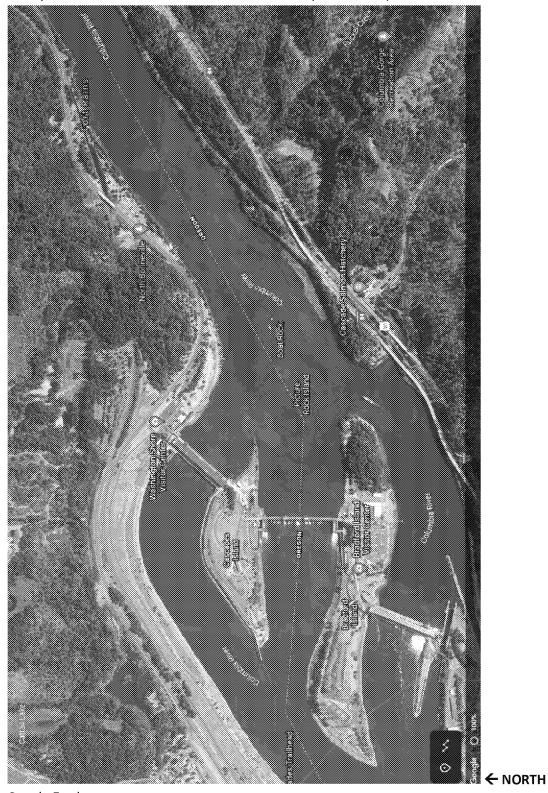
If you have any questions feel free to contact Laura Shira at 509.985.3561 or shil@yakamafish-nsn.gov.

Regards,

Paul Ward Manager

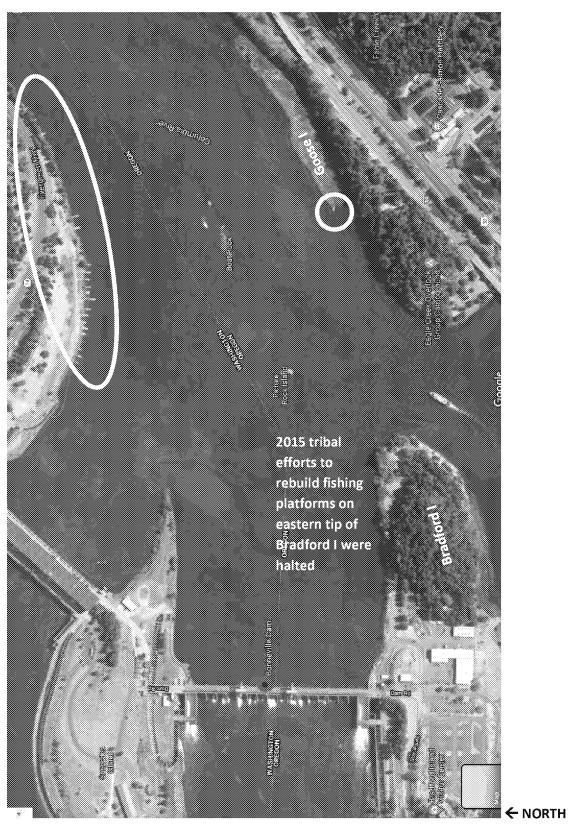
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**Figure 1** – Bonneville/Fort Rains Treaty Fishing Access Site and U&A Shoreline Fishing Platforms (within and upstream of the Bradford Island Site In-River Operable Unit)



Google Earth

Figure 2 – Current U&A tribal fishing platforms along WA shoreline and west tip of Goose Island



GoogleMaps

Page 4

Figure 6 Zone of Actual Contamination and Sediment and Tissue Sample Locations 1004530/F130.001.01/Fige Drawn by: BRADFORD ISLAND LANDFILL Cascade Locks, Oregon Sect. X, p. 212. Sampling Stations

Pra-FS Sediment and Clam (2011)

R Sediment and Clam (2008)

A Pra-FS Smallmouth Bass (2011) 35% Spent Sandwast Grit Disposal Area Surface Water Drainage Direction Zone of Actual Contamination -- Catch Basins and Dram Lines **(42**)

Figure 3 – Zone of Contamination Map

2020-02-13 EPA email



Figure 4 In-River Operable Unit (partially based on assumed home range of small mouth bass)

2014-07-03 Bradford Island River OU Data Evaluation Tech Memo FINAL

Common, Scientific Name, and Population	Federal Status	State Status	Essential Fish Habitat	Designated Critical Habitat	Distribution and Life History
Sockeye salmon <i>(Oncorhynchus nerka)</i> Snake River ESU*	Endangered	Candidate (Washington)	Y	Y	Documented presence.  Migration (adult and juvenile) –  mainstem
Chum salmon <i>(Oncorhynchus keta)</i> Lower Columbia River ESU	Threatened	Candidate (Washington)	Y	Y	Documented presence, spawning and rearing in mainstem. Documented presence, spawning and rearing in Washington tributaries (Hardy Creek; Hamilton Creek)
Steelhead Trout (Oncorhynchus mykiss) Lower Columbia DPS**	Threatened	Candidate (Washington)	N	Y	Migration (adult and juvenile) — mainstem Spawning, Historical presence in upper — Oregon tributaries (Moffett Creek; Tanner Creek; Eagle Creek) Documented presence, spawning, rearing — Washington tributaries (Hardy Creek; Hamilton Creek).
Steelhead Trout (Oncorhynchus mykiss) Snake River Basin DPS	Threatened	Candidate (Washington)	N	Y	Migration (adult and juvenile) – mainstem
Steelhead Trout (Oncorhynchus mykiss) Middle Columbia DPS	Threatened	Candidate (Washington)	N	Y	Migration (adult and juvenile) – mainstem Spawning, Historical presence in upper – Oregon tributaries (Moffett Creek; Tanner Creek; Eagle Creek)
Steelhead Trout (Oncorhynchus mykiss) Upper Columbia DPS	Threatened	None	N	Y	Migration (adult and juvenile) – mainstem
Chinook salmon (Oncorhynchus tsawytscha) Snake River ESU	Threatened	Threatened (Oregon) Candidate (Washington)	Y	Υ	Migration (adult and juvenile) – mainstem

Chinook salmon	Threatened	Candidate	Υ	Υ	Migration (adult and juvenile) –
(Oncorhynchus tsawytscha)		(Washington)			mainstem.
Lower Columbia ESU					Rearing, Spawning, Historical
					presence in upper Oregon
					tributaries (Moffett Creek; Tanner
					Creek; Eagle Creek).
					Documented presence and
					spawning in Washington
					tributaries (Hardy Creek; Hamilton
					Creek)
Coastal cutthroat trout	Species of	None	N	N	Migration (adult and juvenile) –
(Oncorhynchus clarki clarki)	Concern				mainstem
Coho salmon	Threatened	Endangered	Y	Y	Migration (adult and juvenile) –
(Oncorhynchus kisutch)	Imcatched	(Oregon)		•	mainstem
Lower Columbia ESU		(0108011)			Spawning, Historical presence in
Lower Columbia L30					upper Oregon tributaries (Moffett
					Creek; Tanner Creek; Eagle Creek)
					creek, ruimer creek, Eugle creek,
Pink salmon	None	None	Υ	N	Documented presence – odd year
(Oncorhynchus gorbuscha)					run
Pacific lamprey	Species of	None	N	N	Migration (adult and juvenile) –
(Lampropelta tridentata)	Concern				mainstem
					Spawning and rearing in tributaries
					unknown
Bull Trout	Threatened	Candidate	N	Υ	Forage, Migration, Overwinter
(Salvelinus confluentus)		(Washington)			
White sturgeon	None	None	N	N	Spawning below dam
(Acipenser transmontanus)					Resident, multiple use above dam,
					spawning and rearing
Other fish species including					
but not limited to green					
sturgeon, rainbow/redband					
trout, shad, small mouth					
bass, large mouth bass,					
sculpin, crayfish, clams					

<sup>\*</sup>Evolutionary Significant Unit

<sup>\*\*</sup>DPS = Distinct Population Segment